EBERHARD KARLS
UNIVERSITÄT
TÜBINGEN

Mathematisch-
Naturwissenschaftliche
Fakultät

Fachbereich Mathematik

AB Geometrische Analysis,
Differentialgeometrie und
Relativitätstheorie

Sommersemester 2020

Special Lecture Series

On **July 15** at **4:15**, as the first of three lectures this Semester,

Prof. Dr. Simon Brendle
(Columbia University)

will speak on

Compact ancient solutions to the Ricci flow in dimension 3

Ancient solutions are solutions of geometric flows which are defined infinitely far back in time. Ancient solutions play a key role in the study of the Ricci flow. In particular, Perelman showed that any finite time singularity of the Ricci flow in dimension 3 is modeled on an ancient solution which in addition is κ-noncollapsed; these are referred to as ancient κ-solutions.

In 2018, we obtained a complete classification of all noncompact ancient κ-solutions in dimension 3. In these lectures, we will discuss recent work with Panagiota Daskalopoulos and Natasa Sesum which gives a complete classification of all compact ancient κ-solutions in dimension 3.

This seminar will meet online. Please sign up by sending an email to Gerhard Huisken.

Hierzu wird herzlich eingeladen.

G. Huisken